

REMARKS

Claims 14, 15, and 17-26 are pending. Claims 1-13 and 16 are currently canceled.

Claims 14 and 20 are currently amended. The preamble of claim 14 has been amended to recite “A crosslinked heat-activatable adhesive...” Support for this amendment can be found, for example, on page 2, lines 13-19 of the specification as filed. The phrase “wherein a heat-activatable adhesive has upon curing a glass transition temperature...” in claim 14 has been amended to eliminate the words “upon curing”. Claim 20 has been amended to correct the spelling of the word, “vulcanization”. Reconsideration of the application is requested.

§ 103 Rejections

Claims 14-15 and 17-25 stand rejected under 35 USC § 103(a) as purportedly being unpatentable over Ozawa et al. (U.S. 5,385,979). With respect to independent claim 14, it is the Examiner’s position that Ozawa discloses an adhesive composition comprising a heat-reactive phenolic resin, prepared as a novolac phenolic resin and an elastomer, such as chlorinated natural rubber, or acrylonitrile-butadiene copolymer. The Examiner has admitted that the Applicant defines acrylonitrile-butadiene copolymer as being a nitrile butadiene rubber. With regards to the previously entered amendment to claim 14, the Examiner has stated that “[B]ecause Applicant has amended claim 14 to include a crosslinking agent, in an amount of less than about 0.25 wt%, it would have been obvious to one of ordinary skill in the art for the phrase, ‘less than about 0.25 wt%’ to be interpreted as including amounts up to 1 wt%, where about 1 wt% as disclosed in Ozawa would be interpreted as including amounts lower than 1 wt%, which includes amounts less than about 0.25 wt%’. Additionally, with respect to claim 14, the Examiner has asserted that the phrase, “heat-activatable adhesive has upon curing a glass transition temperature of less than about 60oC”, constitutes a ‘capable of’ limitation and that such a recitation is not a positive limitation but only requires the ability to so perform. Finally, the Examiner has stated that the phrase “upon curing” is interpreted as the adhesive not being cured.

The Applicant respectfully traverses this rejection for at least the following reasons. The Applicant asserts that the Examiner has not shown where Ozawa teaches or suggests an adhesive wherein the one or more elastomers are selected from natural rubbers, butyl rubber, nitrile butadiene rubber, synthetic polyisoprene, ethylene-propylene rubber, ethylene-propylene-diene

rubber (EPDM), polybutadiene, polyisobutylene, poly(alpha-olefin), styrene-butadiene random copolymer, fluoroelastomers, silicone elastomer, or combinations thereof. In a telephonic interview (July 21, 2009 – summarized later in this document) the Applicant has explained to the Examiner that Ozawa teaches or suggests only adhesive compositions based on chlorinated or brominated polyolefins (see abstract and col. 5, line 54 – col. 6, line 11 of Ozawa). Ozawa does not teach or suggest the use of acrylonitrile-butadiene copolymer for the adhesive as suggested by the Examiner above. The adhesive compositions of Ozawa are designed to bond elastomeric materials to metal surfaces (col. 1, lines 15-17 of Ozawa). The elastomeric materials which can be bonded to metal surfaces with Ozawa's halogenated polyolefin adhesives are recited in col. 7, lines 23-35 of Ozawa. This list includes acrylonitrile-butadiene copolymer. This is a list of substrates which Ozawa's halogenated polyolefin adhesives can bond to metal. None of the elastomers listed in Applicant's claim 14 are chlorinated or brominated polyolefins. The Applicant has substantiated that natural rubber is not chlorinated by the submission of page 153 of Sperling to the Patent Office as indicated in the Office Action of April 30, 2009. The Applicant also asserts that this document was put on record on March 4, 2009 and has been available to the Examiner since then. The Applicant respectfully requests that the Examiner consider this reference. Since the Examiner has not shown that Ozawa teaches or suggests the use of the elastomers in Applicant's amended claim 14, the Examiner has not made a *prima facie* case of obviousness. Therefore, the Examiner's rejection of claim 14 is improper and should be withdrawn. The Applicant, additionally, traverses the statement of the Examiner that "less than about 0.25 wt%" can be interpreted as including amounts up to 1 wt%. The Applicant does not rely on this statement to overcome the Examiner's rejection. Furthermore, the Applicant has amended claim 14, as explained above, to remove the "capable of" limitation in the claim to address the Examiner's concern. Claims 15 and 17-26 all depend upon amended claim 14 and add further limitations thereto. Since claim 14 is now patentable, likewise so are claims 15 and 17-26.

The rejection of claims 14-15 and 17-25 under 35 USC § 103(a) as purportedly being unpatentable over Ozawa et al. (U.S. 5,385,979) has been overcome and should be withdrawn.

Claim 26 stands rejected under 35 U.S.C. 103(a) as purportedly being unpatentable over Ozawa et al. (U.S. 5,385,979) in view of Kropp et al (U.S. 6,500,891). The Examiner has stated that Ozawa is relied upon for instant claim 14. Claim 26 depends upon and adds further limitations to instant claim 25 which in turn depends upon and adds further limitations to amended claim 14. The Applicant has already shown that Ozawa does not teach or suggest all of the elements of Applicants' claim 14. Kropp does not add claim elements missing from Ozawa, such as the non-halogenated elastomers listed in claim 14, but only serves to teach a novolac phenolic containing adhesive that is used to bond an electronic part of a circuit board to a chip. As a result, the combination of Ozawa and Kropp do not teach or suggest all of the elements of Applicant's claim 26. As such, the Examiner has not made a *prima facie* case of obviousness. As a result, the rejection is improper and should be withdrawn.

In summary, the rejection of 26 under 35 U.S.C. 103(a) as purportedly being unpatentable over Ozawa et al. (U.S. 5,385,979) in view of Kropp et al (U.S. 6,500,891)has been overcome and should be withdrawn.

Telephonic Interview

The Applicant wishes to thank Examiner Ferguson for the telephonic interview held on July 21, 2009 in which the rejections of record were discussed. Several important points were discussed.

- 1) The Applicant and the Examiner confirmed that Sperling submission made on March 4, 2009 to support the Applicant's contention that natural rubber is not chlorinated is of record and accessible. Accordingly, the Examiner will consider this evidence during the examination and reconsideration of the application.

- 2) The Applicant pointed out to the Examiner that Ozawa teaches the use of halogenated polyolefins as components of an adhesive that is used to bond rubbers, such as acrylonitrile-butadiene copolymer to metal surfaces. The acrylonitrile-butadiene copolymer is a substrate to be bonded to the metal using the halogenated polyolefin adhesives of Ozawa.

- 3) The Applicant agreed to amend claim 14 to remove the Examiner's objection to the phrase "upon curing". Furthermore, the Applicant agreed to make the claim preamble recite a crosslinked adhesive so as to address the Examiner's "capable of" limitation concern.
- 4) The Examiner suggested that since the Sperling reference was of record that he would consider issuing a Supplemental Office Action considering that reference. The Applicant suggested that the Examiner wait until this response since the Applicant is hoping for allowance after addressing all of the Examiner's concerns.

In view of the above, it is submitted that the application is in condition for allowance.

Examination and reconsideration of the application as amended is requested.

Respectfully submitted,

22-July-2009
Date

By: _____ /Stephen F. Wolf/
Stephen F. Wolf, Reg. No.: 45,502
Telephone No.: 651-736-9485

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833